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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,293	04/12/2002	Kazuhisa Mochida		8888

7590

02/08/2005

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Cooper & Dunham  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER
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SMITH, TERRI L

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/030,293

**Applicant(s)**MOCHIDA ET AL. *Ch***Examiner**

Terri L. Smith

**Art Unit**

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2002.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-2 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-2 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I, Claims 1 – 2 in the reply filed on December 06, 2004 is acknowledged.
2. Claims 3 – 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 06, 2004.

### *Specification*

3. The disclosure is objected to because of the following informalities: There are several occurrences of the extraneous insertion of the word “a” between the words “at” and “the” (See for example page 5, line 20; page 6, lines 1, 4, 11, and 16; etc.) throughout the disclosure. On page 13, line 4, the word “bright” perhaps should be “bring”, and on line 6, there should be a space between the number “2” and the word “supported”. There are other similar errors throughout the disclosure. Given that some terms and punctuations may have gotten lost in the translation, it is suggested that a word processing grammar check be performed on the disclosure and corrections made in order to make it clear and concise.

Appropriate correction is required.

*Drawings*

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign mentioned in the description: "arrow K" (page 41, lines 2 and 4; page 43, lines 10 and 12; etc.). The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "124" (page 32, lines 14, 15 and 17) and "24" (Fig. 18) have both been used to designate "system controller. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 – 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “the printed wiring board ... and the reflow unit” (claim 1, lines 14 – 17) does not positively describe the function of a transfer mechanism which is a part of the claimed packaging system. Instead, the phrase describes how the printed wiring board is to be held in generally upright position as it is transported through the electronics packaging system. The claim does not positively recite any structures of the transfer mechanism to carry out the claimed functional limitations of how the printed wiring board is to be placed and held in the transfer mechanism when transported.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 2 are rejected, as best understood, under 35 U.S.C. 102(b) as being anticipated by Satou et al., U.S. Patent 5,564,183.

Regarding Claim 1, Satou discloses a printer (see for example solder printing unit, element 1, Fig. 1A) to print solder to either land of a printed wiring board; a placing unit (see for example electronic component mounting unit, element 2, Fig. 1A) to place electronic parts on the lands of the printed wiring board, having the solder printed thereon by the printer; and a reflow unit (see for example soldering unit, element 3, Fig. 1A) to heat the printed wiring board on which the electronic parts have been placed by the placing unit and solder the electronic parts to the printed wiring board; the printed wiring board being brought by a transfer mechanism, while

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being held in generally upright position, through the printer, placing unit and reflow unit in this order (column 14, lines 4 – 11, Satou's system is capable of performing this limitation).

Regarding Claim 2, Satou discloses land-position information is generated by a detecting mechanism (see for example printing data analyzing part, element 22, and analyzing unit, element 27, both in Fig. 1A) provided in the printer before solder is printed by the printer on the lands (column 7, lines 17 – 25) of the printed wiring board; and the placing unit places the electronic part on the printed wiring board on the basis of the land-position information (Fig. 1A, elements 27, 22, and 24; column 8, lines 10 – 22).

### *Conclusion*

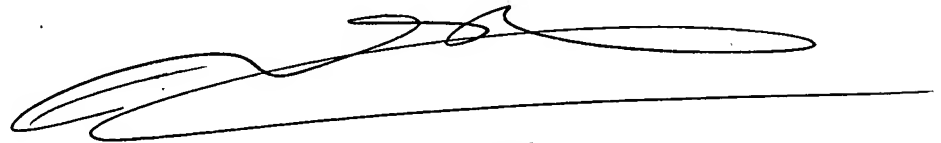
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terri L. Smith whose telephone number is 571-272-7146. The examiner can normally be reached on Monday – Friday between 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TLS  
February 4, 2005

A handwritten signature in dark ink, appearing to read 'Peter Vo', is written over a horizontal line.

**PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700**